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=> file biosis caplus caba agricola

=> s elongate and maize
L1 115 ELONGATE AND MAIZE

=> duplicate remove l1

L2 79 DUPLICATE REMOVE L1 (36 DUPLICATES REMOVED)

=> d ti 1-79

L2 ANSWER 1 OF 79 CAPLUS COPYRIGHT 2005 ACS on STN
TI The roothairless1 gene of **maize** encodes a homolog of sec3, which is involved in polar exocytosis

L2 ANSWER 2 OF 79 CAPLUS COPYRIGHT 2005 ACS on STN
TI Effectiveness of biostimulator Bioalgeen S 90 with selected adjuvants applied in grain corn culture

L2 ANSWER 3 OF 79 CAPLUS COPYRIGHT 2005 ACS on STN
TI Understanding catalytic properties and functions of **maize** starch synthase isozymes

L2 ANSWER 4 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI The elongation rate at the base of a **maize** leaf shows an invariant pattern during both the steady-state elongation and the establishment of the elongation zone.

L2 ANSWER 5 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Latrunculin B-induced plant dwarfism: plant cell elongation is F-actin-dependent.

L2 ANSWER 6 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Plasticity versus canalization: population differences in the timing of shade-avoidance responses.

L2 ANSWER 7 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Differing selection in alternative competitive environments: shade-avoidance responses and germination timing.

L2 ANSWER 8 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Meloidogyne petuniae n. sp. (Nemata: Meloidogynidae), a root-knot nematode parasitic on petunia in Brazil.

L2 ANSWER 9 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Tylencholaimellus brasilensis sp. n. and T. cinctus (Nematoda: Dorylaimida) from tropical areas.

L2 ANSWER 10 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
DUPLICATE 2
TI Experimental analysis of tassel development in the **maize** mutant Tassel seed 6.

L2 ANSWER 11 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Formation of [alpha]- and [beta]-conidia by Phaeocytostroma ambiguum.

L2 ANSWER 12 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Gametophyte genetics in Zea mays L.: dominance of a restoration-of-fertility allele (Rf3) in diploid pollen.

L2 ANSWER 13 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Lodicule function and filament extension in the grasses: potassium ion movement and tissue specialization.

L2 ANSWER 14 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Effects of dietary lipids on the fatty acid composition of triglycerides and phospholipids in tissues of white sturgeon.

L2 ANSWER 15 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
End-to end annealing of plant microtubules by the p86 subunit of eukaryotic initiation factor-(iso)4F.

L2 ANSWER 16 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI Evidence for anoxic zones in 2-3 mm tips of aerenchymatous **maize** roots under low O-2 supply.

L2 ANSWER 17 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI Post-transcriptional regulation of gene expression in oxygen-deprived roots of **maize**.

L2 ANSWER 18 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI Analyses of mutants of three genes that influence root hair development in Zea mays (Gramineae) suggest that root hairs are dispensable.

L2 ANSWER 19 OF 79 CAPLUS COPYRIGHT 2005 ACS on STN
TI Response of winter crops to manganese application on a loamy sand soil

L2 ANSWER 20 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Characterization of growth-related osmiophilic particles in corn coleoptiles and deepwater rice internodes.

L2 ANSWER 21 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Tansley review Number 66. The current status of the acid-growth hypothesis.

L2 ANSWER 22 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI The epidermal surface of the **maize** root tip: III. Isolation of the surface and characterization of some of its structural and mechanical properties.

L2 ANSWER 23 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI Transient responses of cell turgor and growth of **maize** roots as affected by changes in water potential.

L2 ANSWER 24 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI The epidermal surface of the **maize** root tip: I. Development in normal roots.

L2 ANSWER 25 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Mouse peritoneal macrophage prostaglandin E1 synthesis is altered by dietary gamma-linolenic acid.

L2 ANSWER 26 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI The **elongate** method of generating tetraploid **maize** stocks, revisited.

L2 ANSWER 27 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Effect of dietary fats on the fatty acid compositions of serum and immune tissues in chickens.

L2 ANSWER 28 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI CATALASE AND SUPEROXIDE DISMUTASE GENE EXPRESSION AND DISTRIBUTION DURING STEM DEVELOPMENT IN **MAIZE**.

L2 ANSWER 29 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Economic injury levels for management of stalk borer (Lepidoptera: Noctuidae) in corn.

L2 ANSWER 30 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Interspace (is) and string cob (Sg1, Sg2) as stabilizing factors for the

expression of key trait genes (tr, pd).

L2 ANSWER 31 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI THE OUTER EPIDERMIS OF AVENA AND **MAIZE** COLEOPTILES IS NOT A UNIQUE TARGET FOR AUXIN IN ELONGATION GROWTH.

L2 ANSWER 32 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Adenylates contents and energy charge in 'gamma-seedlings' of **maize**.

L2 ANSWER 33 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI CHANGES IN CELL DIMENSIONS IN DEVELOPING ROOTS OF IN-VITRO CULTURED IMMATURE **MAIZE** EMBRYOS ZEA-MAYS L.

L2 ANSWER 34 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI The arrangement of microtubules in leaves of monocotyledonous and dicotyledonous plants.

L2 ANSWER 35 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI STUDIES ON CHANGES OF GOLGI APPARATUS IN THE DIFFERENT DEVELOPING REGIONS OF **MAIZE** SEEDLING ROOT.

L2 ANSWER 36 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Sexual feedback, internode elongation and perfect-flowered dwarfs.

L2 ANSWER 37 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI THE RESPONSE OF THE PRIMARY ROOT MERISTEM OF ZEA-MAYS L. TO VARIOUS PERIODS OF COLD.

L2 ANSWER 38 OF 79 CAPLUS COPYRIGHT 2005 ACS on STN
TI Relationship between the elongation of **maize** coleoptile and its hydroxyproline-rich protein

L2 ANSWER 39 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Capacity of the European eel (Anguilla anguilla) to **elongate** and desaturate dietary linoleic acid.

L2 ANSWER 40 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI The genus Xiphinema in South Africa. XV. A redescription of X. mluci Heyns, 1976 and descriptions of three closely related new species (Nematoda: Dorylaimida).

L2 ANSWER 41 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI ULTRASTRUCTURAL ANALYSIS OF THE SPERM CELLS OF MATURE POLLEN OF **MAIZE** ZEA-MAYS.

L2 ANSWER 42 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI BIOECOLOGY OF RHINOCORIS-FUSCIPES FABR. REDUVIIDAE A POTENTIAL PREDATOR ON INSECT PESTS.

L2 ANSWER 43 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Histological development of Sphacelotheca reiliana on Zea mays.

L2 ANSWER 44 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI HEMICELLULOSES OF CELL WALLS OF A PROSO MILLET PANICUM-MILIACEUM CULTIVAR ABARR CELL SUSPENSION CULTURE.

L2 ANSWER 45 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Outer-inner vascular connections and glume phenotype.

L2 ANSWER 46 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Regional variability in Phaseolus vulgaris L. (II) Seed character frequencies in Transylvania.

L2 ANSWER 47 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI A MARASMIELLUS DISEASE OF **MAIZE** IN LATIN AMERICA.

L2 ANSWER 48 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI WHICH PARTS OF GRAMINEOUS SEEDLINGS MAY **ELONGATE** IMMEDIATELY AFTER GERMINATION?.

L2 ANSWER 49 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Unreduced apomixis in 76-chromosome hybrids of **maize** with Tripsacum.

L2 ANSWER 50 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Mapping of dv and el.

L2 ANSWER 51 OF 79 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN
TI Occurence of double-nonreduced egg cells in **maize** homozygous for the **elongate** gene Zea mays.

L2 ANSWER 52 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Frequency of occurrence of doubly unreduced egg cells in **maize** homozygous for the gene **elongate**.

L2 ANSWER 53 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI OCCURRENCE OF DOUBLE NONREDUCED EGG CELLS IN **MAIZE** HOMO ZYGOUS FOR THE **ELONGATE** GENE.

L2 ANSWER 54 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI STERILIZING EFFECTS OF TRI METHYL PHOSPHATE IN DROSOPHILA-MELANOGASTER.

L2 ANSWER 55 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Indeterminate vs. determinate ears.

L2 ANSWER 56 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI [Plant-parasitic and free-living nematodes in south-eastern USSR]. Fitoparaziticheskie i svobodnozhivushchie nematody yugo-zapada SSSR.

L2 ANSWER 57 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI ELONGATION OF MESOCOTYL AND COLEOPTILE IN GRAMINEOUS CROPS 1. THE ELONGATION RATIO OF MESOCOTYL AND COLEOPTILE.

L2 ANSWER 58 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Seven new species in a new nematode subfamily Duosulciinae (Tylenchidae), with proposals for Duosulcius gen.n., Zanenchus gen.n. and Neomalenchus gen.n.

L2 ANSWER 59 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Responses of selected hormonal systems to mefluidide.

L2 ANSWER 60 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI GROSS MORPHOLOGY OF SCLEROSPORA-PHILIPPINENSIS ISOLATES FROM BUKIDNON ON **MAIZE** INBRED LINES.

L2 ANSWER 61 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI CORRELATIONS OF PERICARP THICKNESS WITH SEVERAL CHARACTERISTICS OF BULGARIAN AND FOREIGN **MAIZE** HYBRIDS AND LINES.

L2 ANSWER 62 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Choice of oviposition site by Chilo, the sorghum stem-borer.

L2 ANSWER 63 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Some characteristics of endosperm ultrastructure in a radiation-induced dwarf **maize** mutant.

L2 ANSWER 64 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Study of the mutagenic effect of ethyl methanesulphonate and

N-nitroso-N-methylurethane in inducing endosperm mutations in inbred **maize** lines.

L2 ANSWER 65 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Growth and survival of young plant roots in dry soil.

L2 ANSWER 66 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Experimental automictic parthenogenesis in **maize**.

L2 ANSWER 67 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Stimulating parthenogenesis in **maize** by doubling the chromosome number in meiosis.

L2 ANSWER 68 OF 79 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI CROSSING-OVER AND DI PLOID EGG FORMATION IN THE **ELONGATE** MUTANT OF **MAIZE**.

L2 ANSWER 69 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Study of the effect of ethyl methanesulphonate and N-nitroso-N-methylurethane after treating the seeds of inbred **maize** lines.

L2 ANSWER 70 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Effect of ethanol on meiotic chromosome behavior.

L2 ANSWER 71 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Three systems for two-ranked ears in corn.

L2 ANSWER 72 OF 79 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN
TI Crossing over and diploid egg formation in the **elongate** mutant of **maize**

L2 ANSWER 73 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI The biochemical cytogenetics of a meiotic mutant in **maize**.

L2 ANSWER 74 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Bacterial leaf stripe of corn in the Philippines.

L2 ANSWER 75 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Two generations of automictic parthenogenesis in **maize**.

L2 ANSWER 76 OF 79 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 22
TI Two independently inherited electrophoretic variants of the lysine-rich histones of **maize** (Zea mays)

L2 ANSWER 77 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Preserve Guatemalan teosinte, a relict link in corn's evolution.

L2 ANSWER 78 OF 79 CABA COPYRIGHT 2005 CABI on STN
TI Georeaction of decapped roots.

L2 ANSWER 79 OF 79 CAPLUS COPYRIGHT 2005 ACS on STN
TI Flowering behavior of sugarcane X **maize** hybrid and the emergence of its tassel by the application of gibberellic acid

=> s l2 and map?
L3 4 L2 AND MAP?

=> d ti 1-4

L3 ANSWER 1 OF 4 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI End-to end annealing of plant microtubules by the p86 subunit of eukaryotic initiation factor-(iso)4F.

L3 ANSWER 2 OF 4 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI Analyses of mutants of three genes that influence root hair development in Zea mays (Gramineae) suggest that root hairs are dispensable.

L3 ANSWER 3 OF 4 CABA COPYRIGHT 2005 CABI on STN
TI **Mapping** of dv and el.

L3 ANSWER 4 OF 4 CABA COPYRIGHT 2005 CABI on STN
TI Bacterial leaf stripe of corn in the Philippines.

=> d bib abs 2 3 4

L3 ANSWER 2 OF 4 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
AN 1994:405671 BIOSIS
DN PREV199497418671
TI Analyses of mutants of three genes that influence root hair development in Zea mays (Gramineae) suggest that root hairs are dispensable.
AU Wen, Tsui-Jung; Schnable, Patrick S. [Reprint author]
CS Dep. Zool. Genetics, Iowa State Univ., Ames, IA 50011, USA
SO American Journal of Botany, (1994) Vol. 81, No. 7, pp. 833-842.
CODEN: AJBOAA. ISSN: 0002-9122.
DT Article
LA English
ED Entered STN: 23 Sep 1994
Last Updated on STN: 23 Sep 1994
AB Root hairs are specialized epidermal cells that are thought to play an important role in plant nutrition by facilitating the absorption of water and nutrients. Three **maize** mutants with abnormal root hair morphologies (rth1, rth2, and rth3) have been isolated from Mutator transposon stocks. All three root hair mutant phenotypes are controlled by single recessive alleles. The rth1 mutant initiates normal-looking root hair primordia that fail to **elongate**. The normal-looking root hair primordia of the rth2 mutant **elongate** to only approximately one-fifth to one-fourth the length of wild type root hairs. Like rth1 primordia, rth3 primordia undergo little elongation. However, unlike the relatively normal-looking rth1 primordia, rth3 primordia are distinctly abnormal when viewed through a scanning electron microscope. The rth1 mutant exhibits pleiotropic nutrient deficiencies, while the rth2 and rth3 mutants grow vigorously. This finding suggests that under some environmental conditions, root hairs are less important to plant growth than has been previously thought. The rth1, rth2, and rth3 genes have been **mapped** to chromosomes IL, 5L, and 1S, respectively, via crosses with BA translocation stocks. The rth2 allele exhibits reduced transmission through the male gametophyte, but a normal rate of transmission through female gametophytes; rth1 and rth3 are transmitted at normal rates.

L3 ANSWER 3 OF 4 CABA COPYRIGHT 2005 CABI on STN
AN 83:91416 CABA
DN 19831623804
TI **Mapping** of dv and el
AU Curtis, C.
CS University of Missouri, Columbia, USA.
SO Maize Genetics Cooperation News Letter, (1983) No. 57, pp. 31-32.
DT Journal
LA English
ED Entered STN: 19941101
Last Updated on STN: 19941101
AB Homozygous dv (divergent spindle) **maize** plants were crossed with some of the B-A translocation series. The various progeny families were enriched with respect to hypoploids and sporocytes were examined for the divergent spindle character. Results indicated that chromosome arms 1S, 5S, 5L, 6S, 7L and 9S do not contribute to this character. Families giving elel (**elongate**) segregates were also crossed to some B-A

translocations. Cytological examination of sporocytes of the progeny tentatively assigned el to the long arm of chromosome 8.

L3 ANSWER 4 OF 4 CABA COPYRIGHT 2005 CABI on STN
AN 77:56928 CABA
DN 19761328431
TI Bacterial leaf stripe of corn in the Philippines
AU Karganilla, A. D.; Cabauatan, P. Q.
CS Univ. Illinois, Urbana, USA.
SO Philippine Agriculturist, (1974) Vol. 58, No. 3/4, pp. 105-114. 2 fig.
ISSN: 0031-7454
DT Journal
LA English
ED Entered STN: 19941101
Last Updated on STN: 19941101
AB Symptoms on **maize** consist of narrow, irregular, **elongate** and water soaked lesions, later becoming thin, papery, translucent and brown to straw coloured. Leaf shredding was observed in severe cases. On morphological, cultural and physiological characteristics the causal bacterium was identified as Pseudomonas alboprecipitans [CMI **Map** 511].

=> s apomixis and maize
L4 254 APOMIXIS AND MAIZE

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L5 ANSWER 1 OF 205 CAPLUS COPYRIGHT 2005 ACS on STN
TI RFLP methods and DNA markers for screening for introgression of novel genetic variation in **maize** and hybrids with Tripsacum and/or teosinte

L5 ANSWER 2 OF 205 CAPLUS COPYRIGHT 2005 ACS on STN
TI Rice LEC1 (leafy cotyledon 1 transcriptional activator) inducing somatic embryogenesis and **apomixis**, methods of using it to enhance plant transformation

L5 ANSWER 3 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Esterase isoenzymes as markers for the VA 1 gene of Zea mays and for the B linkage group of Tripsacum dactyloides.

L5 ANSWER 4 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI Glutamate oxaloacetic transaminase and malate dehydrogenase isozymes of Zea mays L.XTripsacum dactyloides L. hybrids and parents.

L5 ANSWER 5 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI Genetic materials for transmission into **maize**.

L5 ANSWER 6 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI Heterochronic expression of sexual reproductive programs during apomictic development in Tripsacum.

L5 ANSWER 7 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Engineering of **apomixis** in crop plants: what can we learn from sexual model systems?.

L5 ANSWER 8 OF 205 CAPLUS COPYRIGHT 2005 ACS on STN
TI Isozyme markers for 5S and 6L **maize** chromosomes and for "D" and "L" linkage groups of Tripsacum dactyloides L. related to the apomictic

mode of reproduction

L5 ANSWER 9 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Production of unreduced apomicts by diploidization of lines predisposed to reduced parthenogenesis.

L5 ANSWER 10 OF 205 CAPLUS COPYRIGHT 2005 ACS on STN
TI Sequence of plant protein CHD and uses in transformation of plant to induce somatic embryogenesis and **apomixis**

L5 ANSWER 11 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Commercial plant breeding in South Africa.

L5 ANSWER 12 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Glimpses into sexual plant reproduction: the pursuit of **apomixis**

L5 ANSWER 13 OF 205 CAPLUS COPYRIGHT 2005 ACS on STN
TI Flower-specific gene from **maize** and transgenic plants with a modified flower and seed development

L5 ANSWER 14 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI A genetic linkage map of diploid Paspalum notatum.

L5 ANSWER 15 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI Strategies for isolating mutants in Hieracium with dysfunctional **apomixis**.

L5 ANSWER 16 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI **Apomixis** in Tripsacum: Comparative mapping of a multigene phenomenon.

L5 ANSWER 17 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI Tripsacum dactyloides (Poaceae): A natural model system to study parthenogenesis.

L5 ANSWER 18 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI The effect of pollinator on kernel weight in pseudogamous apomictic corn-gamagrass hybrids.

L5 ANSWER 19 OF 205 CAPLUS COPYRIGHT 2005 ACS on STN
TI Genetic materials from hybrids of Tripsacum and perennial teosinte for transmission into **maize**

L5 ANSWER 20 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Independent inheritance and expression of apomeiosis and parthenogenesis in **maize**-gama grass hybrids.

L5 ANSWER 21 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI The genetic programs of nonreduction and parthenogenesis in corn-gamagrass hybrids are inherited and expressed in an independent manner.

L5 ANSWER 22 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Genetic variation in the progeny of **maize**/Tripsacum hybrids.

L5 ANSWER 23 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI Plant genetic resources: What can they contribute toward increased crop productivity?.

L5 ANSWER 24 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Commercial strategies for exploitation of heterosis.

L5 ANSWER 25 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Inactivation of the imprinting effects in **maize**-Tripsacum hybrids.

L5 ANSWER 26 OF 205 CABA COPYRIGHT 2005 CABI on STN

TI Cytological and molecular evaluation of the reproductive behavior of Tripsacum andersonii and a female fertile derivative (Poaceae).

L5 ANSWER 27 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI Apomictically reproducing 39-chromosome **maize**-Tripsacum hybrids.

L5 ANSWER 28 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI Investigation of apomictic **maize**-Tripsacum hybrids.

L5 ANSWER 29 OF 205 CAPLUS COPYRIGHT 2005 ACS on STN
TI Apomictically reproducing 39-chromosome **maize**-tripsacum hybrids

L5 ANSWER 30 OF 205 CAPLUS COPYRIGHT 2005 ACS on STN
TI Investigation of apomictic **maize**-tripsacum hybrids

L5 ANSWER 31 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI A genetic map of the apospory-region in Brachiaria hybrids: Identification of two markers closely associated with the trait.

L5 ANSWER 32 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Plant regeneration from somatic culture of apomictic **maize** -Tripsacum hybrids.

L5 ANSWER 33 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Improvement of anther culture response of apomictic **maize** -Tripsacum hybrids.

L5 ANSWER 34 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI **Apomixis** and endosperm development.

L5 ANSWER 35 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Perspectives of developing **apomixis** in **maize**.

L5 ANSWER 36 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI Non-Mendelian transmission of **apomixis** in **maize** -Tripsacum hybrids caused by a transmission ratio distortion.

L5 ANSWER 37 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI Mapping diplosporous **apomixis** in tetraploid Tripsacum: One gene or several genes?.

L5 ANSWER 38 OF 205 CAPLUS COPYRIGHT 2005 ACS on STN
TI Apomictic reproduction by **maize**/Tripsacum hybrids using gene N and gene A for controlling nonreduction and apomictic development and using Mz6-Tr16 translocation

L5 ANSWER 39 OF 205 CABA COPYRIGHT 2005 CABI on STN DUPLICATE 11
TI The reproductive versatility of eastern gamagrass.

L5 ANSWER 40 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI Genetic fingerprinting for determining the mode of reproduction in Paspalum notatum, a subtropical apomictic forage grass.

L5 ANSWER 41 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Megasporocyte callose in apomictic buffelgrass, Kentucky bluegrass, Pennisetum squamulatum Fresen, Tripsacum L., and weeping lovegrass.

L5 ANSWER 42 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI Identification of a **maize** linkage group related to **apomixis** in Brachiaria.

L5 ANSWER 43 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI Dosage effects in the endosperm of diplosporous apomictic Tripsacum (Poaceae).

L5 ANSWER 44 OF 205 CABA COPYRIGHT 2005 CABI on STN

TI Possibilities of diagnosis of parthenogenesis by culture in vitro of unpollinated ovaries.

L5 ANSWER 45 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Cytological manifestation of **apomixis** in AT-1 plants of corn.

L5 ANSWER 46 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Development of seeds with haploid embryo on haploid plants of parthenogenetic line.

L5 ANSWER 47 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Producing of parthenogenetic forms of **maize**.

L5 ANSWER 48 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI The impact of plant molecular genetics.

L5 ANSWER 49 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Registration of SG4X-1 germplasm of eastern gamagrass.

L5 ANSWER 50 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI Assignment of a gene(s) conferring **apomixis** in Tripsacum to a chromosome arm: Cytological and molecular evidence.

=> d bib abs 50 47 42 38 37 36 31

L5 ANSWER 50 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
AN 1997:87668 BIOSIS
DN PREV199799379381
TI Assignment of a gene(s) conferring **apomixis** in Tripsacum to a chromosome arm: Cytological and molecular evidence.
AU Kindiger, B. [Reprint author]; Bai, D. [Reprint author]; Sokolov, V.
CS U.S. Dep. Agric., Agric. Res. Serv., Southern Plains Range Res. Stn., 2000 18th St., Woodward, OK 73801, USA
SO Genome, (1996) Vol. 39, No. 6, pp. 1133-1141.
CODEN: GENOE3. ISSN: 0831-2796.
DT Article
LA English
ED Entered STN: 26 Feb 1997
Last Updated on STN: 26 Feb 1997
AB Attempts are underway to locate and transfer genes conferring diplosporous **apomixis** from Tripsacum to **maize**. The objective of this study was to evaluate several apomictic and sexual **maize** -Tripsacum hybrids for the presence or absence of Tripsacum chromosomes, PCR-RAPD generated markers, and RFLP markers that would have an association with apomictic development. Cytological and molecular analysis resulted in the identification of the Tripsacum chromosome arm carrying the gene(s) conferring diplosporous **apomixis**. Evaluations made on apomictic sexually derived **maize** + Tripsacum addition lines and an apomictic line possessing a Mz6L-Tr16L translocation were used to establish the location of the gene(s). Results of the study indicate that the successful transfer of a single Tripsacum chromosome is all that is necessary to maintain apomictic reproduction in a **maize** background. Additional use of this material may facilitate the development of an apomictic **maize** prototype and the eventual isolation of the gene(s).

L5 ANSWER 47 OF 205 CABA COPYRIGHT 2005 CABI on STN
AN 97:103040 CABA
DN 19971608059
TI Producing of parthenogenetic forms of **maize**
AU Tyrnov, V. S.
CS Saratov State University, Saratov, Russia.
SO Maize Genetics Cooperation Newsletter, (1997) No. 71, pp. 73-74.
DT Journal
LA English

ED Entered STN: 19970916
Last Updated on STN: 19970916
AB Characteristics of the parthogenetic **maize** line AT1 are briefly outlined. It was previously determined that parthenogenesis in AT1 is a nuclear-encoded trait. AT3, an analogue of AT1, has been produced which has yellow seeds, green leaves and white roots. Its use in elucidating the control of **apomixis** and in the synthesis of new apomictic forms is considered.

L5 ANSWER 42 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
AN 1997:226712 BIOSIS
DN PREV199799518428
TI Identification of a **maize** linkage group related to **apomixis** in Brachiaria.
AU Apessino, S. C. [Reprint author]; Ortiz, J. P. A.; Leblanc, O.; Do Valle, C. B.; Evans, C.; Hayward, M. D.
CS Inst. Grassland and Environmental Res., Plas Gogerddan, Aberystwyth SY23 3EB, UK
SO Theoretical and Applied Genetics, (1997) Vol. 94, No. 3-4, pp. 439-444.
CODEN: THAGA6. ISSN: 0040-5752.
DT Article
LA English
ED Entered STN: 22 May 1997
Last Updated on STN: 22 May 1997
AB A bulked segregant analysis using RFLPs and RAPDs was carried out to identify molecular markers co-segregating with **apomixis** in a Brachiaria F-1 population. The test population used was a cross between sexual B. ruziziensis R44 and the aposporous apomictic Brachiaria brizantha cv Marandu. The Brachiaria genome was systematically scanned using 61 cDNA and genomic **maize** clones detecting 65 loci located at 40 cM, on average, one from each other in the **maize** genome. The finding of a clone that presented a polymorphic band co-segregating with **apomixis** (umc147) led to the identification of another marker within the same area (umc72). The clones belong to a duplicated linkage group that maps to the distal part of **maize** chromosome-1 long arm and chromosome-5 short arm. RAPD analysis using 184 primers from Operon sets yielded one more marker (OPC4) significantly linked to the trait mapping the same locus. OPC4 had been previously reported as a potential marker for apospory in Pennisetum. A map of the region was constructed using additional clones that belong to the same **maize** linkage group. Since that was the only genomic region that presented an apomixislinked polymorphism our observations support the existence of a single locus directing apospory in Brachiaria.

L5 ANSWER 38 OF 205 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:315331 CAPLUS
DN 126:289018
TI Apomictic reproduction by **maize**/Tripsacum hybrids using gene N and gene A for controlling nonreduction and apomictic development and using Mz6-Tr16 translocation
IN Kindiger, Bryan K.; Sokolov, Victor
PA United States Dept. of Agriculture, USA
SO PCT Int. Appl., 62 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9711167	A1	19970327	WO 1996-US15168	19960923
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,				

IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM

	US 5710367	A	19980120	US 1995-532904	19950922
	CA 2229420	AA	19970327	CA 1996-2229420	19960923
	AU 9673673	A1	19970409	AU 1996-73673	19960923
	AU 736390	B2	20010726		
	EP 851916	A1	19980708	EP 1996-935892	19960923
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
	CN 1202199	A	19981216	CN 1996-198378	19960923
	BR 9610645	A	19990914	BR 1996-10645	19960923
PRAI	US 1995-532904	A	19950922		
	WO 1996-US15168	W	19960923		

AB Apomictic **maize**/Tripsacum hybrids having a ratio of **maize** chromosomes:Tripsacum chromosomes of at least 30:9 have been developed. These hybrids are useful for introgressing diplosporous apomictic reproduction into a **maize** background toward the ultimate goal of establishing immortalized com. lines of apomictic **maize** having stably inherited characteristics without the need for continuously producing hybrid seed by repeated crossings of selected parental lines. DNA primers for use in assaying **maize**/Tripsacum hybrids for apomictic reproduction behavior are provided.

L5 ANSWER 37 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
AN 1998:121457 BIOSIS
DN PREV199800121457
TI Mapping diplosporous **apomixis** in tetraploid Tripsacum: One gene or several genes?.
AU Grimanelli, Daniel [Reprint author]; Leblanc, Olivier; Espinosa, Elsa; Perotti, Enrico; Gonzalez De Leon, Diego; Savidan, Yves
CS ORSTOM-CIMMYT, Apdo 6-641, 06600, Mexico DF, Mexico
SO Heredity, (Jan., 1998) Vol. 80, No. 1, pp. 33-39. print.
CODEN: HDTYAT. ISSN: 0018-067X.
DT Article
LA English
ED Entered STN: 5 Mar 1998
Last Updated on STN: 5 Mar 1998
AB Polyploids in Tripsacum, a wild relative of **maize**, reproduce through the diplosporous type of **apomixis**, an asexual mode of reproduction through seeds. Diplosporous **apomixis** involves both the failure of meiosis and the parthenogenetic development of the unreduced gametes, resulting in progenies that are exact genetic copies of the mother plant. **Apomixis** is believed to be controlled by one single dominant allele, responsible for the whole developmental process. Construction of a linkage map for the chromosome controlling diplosporous **apomixis** in Tripsacum was carried out in both tetraploid-apomictic and diploid-sexual Tripsacum species using **maize** restriction fragment length polymorphism (RFLP) probes. A high level of collinearity was observed between the Tripsacum chromosome carrying the control of **apomixis** and a duplicated segment in the **maize** genome. In the apomictic tetraploid, there was a strong restriction to recombination, as compared to the corresponding genomic segment in sexual plants and **maize**. This suggests that **apomixis**, although inherited as a single Mendelian allele, might really be controlled by a cluster of linked loci. The analysis also revealed the tetrasomic nature of the inheritance of the chromosomal segment controlling **apomixis**, which contradicts the usually accepted hypothesis of an allopolyploid origin of apomictic species. The implications of these data for the transfer of **apomixis** into cultivated crops are discussed, and a new approach to studying the genetics of **apomixis**, based on comparative mapping, is proposed.

L5 ANSWER 36 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
AN 1998:121458 BIOSIS
DN PREV199800121458
TI Non-Mendelian transmission of **apomixis** in **maize** -Tripsacum hybrids caused by a transmission ratio distortion.
AU Grimanelli, Daniel [Reprint author]; Leblanc, Olivier; Espinosa, Elsa;

Perotti, Enrico; Gonzalez De Leon, Diego; Savidan, Yves
CS ORSTOM-CIMMYT, Apdo 6-641, 06600 Mexico, DF, Mexico
SO Heredity, (Jan., 1998) Vol. 80, No. 1, pp. 40-47. print.
CODEN: HDTYAT. ISSN: 0018-067X.
DT Article
LA English
ED Entered STN: 5 Mar 1998
Last Updated on STN: 5 Mar 1998
AB **Apomixis** is a mode of asexual reproduction through seeds. The apomictic process bypasses both meiosis and egg cell fertilization, producing offspring that are exact genetic replicas of the mother plant. In the Tripsacum agamic complex, all polyploids reproduce through the diplosporous type of **apomixis**, and diploids are sexual. In this paper, molecular markers linked with diplospory were used to analyse various generations of **maize**-Tripsacum hybrids and backcross derivatives and to derive a model for the inheritance of diplosporous reproduction. The results suggest that the gene or genes controlling **apomixis** in Tripsacum are linked with a segregation distorter-type system promoting the elimination of the **apomixis** alleles when transmitted through haploid gametes. Hence, this model offers an explanation of the relationship between **apomixis** and polyploidy. The evolutionary importance of this mechanism, which protects the diploid level from being invaded by **apomixis**, is discussed.

L5 ANSWER 31 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
AN 1998:347226 BIOSIS
DN PREV199800347226
TI A genetic map of the apospory-region in Brachiaria hybrids: Identification of two markers closely associated with the trait.
AU Pessino, Silvina C. [Reprint author]; Evans, Clive; Ortiz, Juan Pablo A.; Armstead, Ian; Valle, Cacilda B. Dos; Hayward, Michael D.
CS PROMUBIE, Seccion Biol. Mol., Fac. Ciencias Bioquimicas Farmaceuticas, UNR, Suipacha 531, 2000 Rosario, Argentina
SO Hereditas (Lund), (May, 1998) Vol. 128, No. 2, pp. 153-158. print.
CODEN: HEREAY. ISSN: 0018-0661.
DT Article
LA English
ED Entered STN: 13 Aug 1998
Last Updated on STN: 13 Aug 1998
AB The objective of this work was to identify molecular markers tightly linked to the gene controlling apospory in a hybrid population derived from a cross between apomictic Brachiaria brizantha and sexual Brachiaria ruziziensis. Since a **maize** chromosome 5 linkage group had previously been associated with the **apomixis** locus in Brachiaria we used twenty-five RFLP clones that map in detail **maize** chromosome 5 to cover systematically all syntenic regions of the hybrid genome. Forty-six AFLP markers were also generated. Three RFLP markers (detected by rz567, rz273, and cdo507) and two AFLP markers (PAM52-5 and PAM49-13) appeared to be related to the apo-region. Segregation data, together with previously reported data (corresponding to RFLP markers umc147, umc72, csu134, csu149 and RAPD marker OPC4) were used to generate a complete map of the region. Markers PAM52-5 and PAM49-13 were located respectively at 1.2 cM and 5.7 cM either side of the target locus. The map shows close synteny to regions of **maize** chromosome 5 and rice chromosome 2.

=> d ti 51-70

L5 ANSWER 51 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI Evaluation of apomictic reproduction in a set of 39 chromosome **maize**-Tripsacum backcross hybrids.

L5 ANSWER 52 OF 205 CAPLUS COPYRIGHT 2005 ACS on STN
TI A comparative analysis of **apomixis** in **maize**-tripsacum hybrids and gamagrass

L5 ANSWER 53 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI Perspectives of developing **apomixis** in **maize**.

L5 ANSWER 54 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI A system for genetic change in apomictic eastern gamagrass.

L5 ANSWER 55 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Registration of FGT-1 eastern gamagrass germplasm.

L5 ANSWER 56 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Prospects for obtaining **apomixis** in **maize**.

L5 ANSWER 57 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI Reproductive behavior in **maize**-tripsacum polyhaploid plants:
Implications for the transfer of **apomixis** into **maize**.

L5 ANSWER 58 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI A comparison of apomictic reproduction in eastern gamagrass (Tripsacum dactyloides (L.) L.) and **maize**-Tripsacum hybrids.

L5 ANSWER 59 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Studies on the genetic control of **apomixis** in Tripsacum.

L5 ANSWER 60 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI Detection of the apomictic mode of reproduction in **maize**
-Tripsacum hybrids using **maize** RFLP markers.

L5 ANSWER 61 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Induced mutations and molecular techniques for crop improvement.
Proceedings, Vienna, Austria, 19-23 June 1995.

L5 ANSWER 62 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Chromosome doubling in Tripsacum: the production of artificial, sexual tetraploid plants.

L5 ANSWER 63 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI **Apomixis** and F1 hybrids.

L5 ANSWER 64 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI Grass inflorescence and spikelet culture: An appraisal.

L5 ANSWER 65 OF 205 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
TI Megasporogenesis and megagametogenesis in several Tripsacum species (Poaceae).

L5 ANSWER 66 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI [The promise of **apomixis**].
Les promesses de l'apomixie.

L5 ANSWER 67 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Series of latest achievements obtained on utilization of crop germplasm resources in China.

L5 ANSWER 68 OF 205 CABA COPYRIGHT 2005 CABI on STN
TI Timing of megasporogenesis in Tripsacum species (Poaceae) as related to the control of **apomixis** and sexuality.

L5 ANSWER 69 OF 205 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2005) on STN
TI **Maize** X Tripsacum hybridization and the potential for **apomixis** transfer for **maize** improvement.

L5 ANSWER 70 OF 205 CABA COPYRIGHT 2005 CABI on STN

TI **Apomixis**: exploiting hybrid vigor in rice.

=> s l5 and map?
L6 15 L5 AND MAP?

=> d ti 1-15

L6 ANSWER 1 OF 15 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI A genetic linkage **map** of diploid Paspalum notatum.

L6 ANSWER 2 OF 15 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI **Apomixis** in Tripsacum: Comparative **mapping** of a multigene phenomenon.

L6 ANSWER 3 OF 15 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI Apomictically reproducing 39-chromosome **maize**-Tripsacum hybrids.

L6 ANSWER 4 OF 15 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI A genetic **map** of the apospory-region in Brachiaria hybrids: Identification of two markers closely associated with the trait.

L6 ANSWER 5 OF 15 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI **Mapping** diplosporous **apomixis** in tetraploid Tripsacum: One gene or several genes?.

L6 ANSWER 6 OF 15 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI Identification of a **maize** linkage group related to **apomixis** in Brachiaria.

L6 ANSWER 7 OF 15 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI Assignment of a gene(s) conferring **apomixis** in Tripsacum to a chromosome arm: Cytological and molecular evidence.

L6 ANSWER 8 OF 15 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI Detection of the apomictic mode of reproduction in **maize** -Tripsacum hybrids using **maize** RFLP markers.

L6 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN
TI Isozyme markers for 5S and 6L **maize** chromosomes and for "D" and "L" linkage groups of Tripsacum dactyloides L. related to the apomictic mode of reproduction

L6 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN
TI Apomictically reproducing 39-chromosome **maize**-tripsacum hybrids

L6 ANSWER 11 OF 15 CABA COPYRIGHT 2005 CABI on STN
TI The impact of plant molecular genetics.

L6 ANSWER 12 OF 15 CABA COPYRIGHT 2005 CABI on STN
TI **Apomixis** and F1 hybrids.

L6 ANSWER 13 OF 15 CABA COPYRIGHT 2005 CABI on STN
TI Induced mutations and molecular techniques for crop improvement. Proceedings, Vienna, Austria, 19-23 June 1995.

L6 ANSWER 14 OF 15 CABA COPYRIGHT 2005 CABI on STN
TI [The promise of **apomixis**]. Les promesses de l'apomixie.

L6 ANSWER 15 OF 15 CABA COPYRIGHT 2005 CABI on STN
TI Plant breeding perspectives.

=> d bib abs 11 9 8 2 1

L6 ANSWER 11 OF 15 CABA COPYRIGHT 2005 CABI on STN
AN 97:39381 CABA
DN 19971602449
TI The impact of plant molecular genetics
AU Sobral, B. W. S. [EDITOR]
CS CAMBIA Americas, 11099 North Torrey Pines Road, Suite 295, La Jolla, CA 92037, USA.
SO The impact of plant molecular genetics, (1996) pp. xvii + 348. ref. at ends of chapters.
Publisher: Birkhauser Boston Inc. Cambridge
ISBN: 0-8176-3802-4
CY United States
DT Book
LA English
ED Entered STN: 19970422
Last Updated on STN: 19970422
AB This multiauthor book contains the following sections (and chapters): (1) Genetics and breeding (genetics of polyploids, validation strategies for QTL **mapping**, complex trait dissection in forest trees using molecular markers, the use of comparative genome **mapping** in the identification, cloning and manipulation of important plant genes; the potential impacts of **apomixis**: a molecular genetics approach; and the role of meiotic recombination in generating novel genetic variability); (2) Evolution and phylogenetics (molecular markers in plant conservation genetics, identifying links between genotype and phenotype using marker loci and candidate genes; integrating genetics, phylogenetics and developmental biology; molecular variation and the delimitation of species); (3) Microorganisms in agriculture: two examples (application of the polymerase chain reaction to the detection of plant pathogens; molecular approaches to understanding and manipulating field ecology of microorganisms in agriculture); (4) Tools: software and hardware (informatics and genomic research; instrumentation for automated molecular marker acquisition and analysis); (5) The experience of molecular marker assisted breeding (including molecular biology and traditional breeding applied to the improvement of **maize** nutritional quality); and (6) Examples of social and economic impact of new technologies (economic impact of molecular genetics on international forestry, molecular anthropology of cassava cyanogenesis, structural adjustment and biotechnological demand in South America; the case of Brazil).

L6 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:241035 CAPLUS
DN 141:389467
TI Isozyme markers for 5S and 6L **maize** chromosomes and for "D" and "L" linkage groups of Tripsacum dactyloides L. related to the apomictic mode of reproduction
AU Tsanev, V.; Vladova, R.; Petkolicheva, K.; Kraptchev, B.; Milanov, C.
CS Acad. D. Kostoff Institute of Genetics, Bulgarian Academy of Sciences, Sofia, 1113, Bulg.
SO Dokladi na Bulgarskata Akademiya na Naukite (2003), 56(6), 99-104
CODEN: DBANEH; ISSN: 0861-1459
PB Bulgarska Akademiya na Naukite
DT Journal
LA English
AB Isoenzymes of glutamate oxaloacetic transaminase and malate dehydrogenase of Zea mays L. + Tripsacum dactyloides L. hybrids and their parents were studied. The results suggested that isoforms of these enzymes may be used as markers of genes localized on 5S and 6L **maize** chromosomes and on linkage groups "D" and "L" of T. dactyloides which have a regulatory effect on the fertility and on the apomictic mode of reproduction
RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 8 OF 15 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
AN 1995:361904 BIOSIS
DN PREV199598376204

TI Detection of the apomictic mode of reproduction in **maize** -Tripsacum hybrids using **maize** RFLP markers.
AU Leblanc, O. [Reprint author]; Grimanelli, D.; Gonzalez-De-Leon, D.; Savidan, Y.
CS ORSTOM, Lab. Ressources Genet. d'Amelioration Plantes Tropicales, BP 5045, 34032 Montpellier Cedex, France
SO Theoretical and Applied Genetics, (1995) Vol. 90, No. 7-8, pp. 1198-1203. CODEN: THAGA6. ISSN: 0040-5752.
DT Article
LA English
ED Entered STN: 30 Aug 1995
Last Updated on STN: 30 Aug 1995
AB Polyploid plants in the genus Tripsacum, a wild relative of **maize** , reproduce through gametophytic **apomixis** of the diplosporous type, an asexual mode of reproduction through seed. Moving gene(s) responsible for the apomictic trait into crop plants would open new areas in plant breeding and agriculture. Efforts to transfer **apomixis** from Tripsacum into **maize** at CIMMYT resulted in numerous intergeneric F-1 hybrids obtained from various Tripsacum species. A bulk-segregant analysis was carried out to identify molecular markers linked to diplospory in T. dactyloides. This was possible because of numerous genome similarities among related species in the Andropogoneae. On the basis of **maize** RFLP probes. three restriction fragments co-segregating with diplospory were identified in one **maize** -Tripsacum dactyloides F, population that segregated 1:1 for the mode of reproduction. The markers were also found to be linked in the **maize** RFLP **map**, on the distal end of the long arm of chromosome 6. These results support a simple inheritance of diplospory in Tripsacum. Manipulation of the mode of reproduction in **maize** -Tripsacum backcross generations, and implications for the transfer of **apomixis** into **maize**, are discussed.

L6 ANSWER 2 OF 15 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
AN 2001:245931 BIOSIS
DN PREV200100245931
TI **Apomixis** in Tripsacum: Comparative **mapping** of a multigene phenomenon.
AU Blakey, C. A.; Goldman, S. L. [Reprint author]; Dewald, C. L.
CS Plant Science Research Facility, University of Toledo, Toledo, OH, 43606, USA
SO Genome, (April, 2001) Vol. 44, No. 2, pp. 222-230. print. CODEN: GENOE3. ISSN: 0831-2796.
DT Article
LA English
ED Entered STN: 23 May 2001
Last Updated on STN: 19 Feb 2002
AB A relationship has been established between the expression of **apomixis** in natural polyploids of Tripsacum dactyloides and fertility as measured by percent seed set. Thus, fertility may be reliably used as a defining phenotype for **apomixis** when scoring the progeny from diploid (2n = 2x = 36) x tetraploid (2n = 4x = 72) crosses in Tripsacum. By exploiting the relationship between **apomixis** and fertility, as defined by seed set, analyses were performed on a set of related second-generation triploid populations segregating for **apomixis**. These populations were derived from sexual (diploid) X apomictic (tetraploid) crosses. Six out of 25 genome-dispersed restriction fragment length polymorphism (RFLP) markers co-segregate with fertility. Five of these markers were previously reported and include: php20855, tda48, tda53, umc62, and umc83, and are linked to Tripsacum genetic linkage groups F, I, H, L, and A, respectively. Significantly, we report here the syntenic relationships of the **maize** chromosome intervals to Tripsacum that segregate for numerous meiosis-specific and fertility-associated genes. Utilizing RFLP locus comparative **mapping** based on conservation of chromosome (genic) regions between related species, it may be concluded that the genes controlling fertility have been preserved in both Tripsacum and

maize. A sixth marker, umc166, has also been shown to co-segregate with fertility and is conserved in both grass species. Specifically, umc166 is linked to Tripsacum linkage group D and, by syntenic comparison, to the short arm of **maize** chromosome 5. Encoded within this marked interval is the gene Ameiotic1 (Am1) whose function is required for the initiation of meiosis in both micro- and megaspore mother cells and whose absence of expression in the female is, in all likelihood, a prerequisite for the expression of **apomixis**
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L6 ANSWER 1 OF 15 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
AN 2001:425992 BIOSIS
DN PREV200100425992
TI A genetic linkage **map** of diploid Paspalum notatum.
AU Ortiz, Juan Pablo A. [Reprint author]; Pessino, Silvina C.; Bhat, Vishnu; Hayward, Michael D.; Quarin, Camilo L.
CS Instituto de Botanica del Nordeste (IBONE), Facultad de Ciencias Agrarias, UNNE, 3400, Corrientes, Argentina
jortiz@agatha.unr.edu.ar
SO Crop Science, (May-June, 2001) Vol. 41, No. 3, pp. 823-830. print.
CODEN: CRPSAY. ISSN: 0011-183X.
DT Article
LA English
ED Entered STN: 12 Sep 2001
Last Updated on STN: 22 Feb 2002
AB Paspalum notatum Flugge is a subtropical grass native to South America. The most common form in the USA is P. notatum var. saurae Parodi (Pensacola bahiagrass), which is a valuable forage. Pensacola bahiagrass is a sexual diploid, while most other races of P. notatum are apomictic tetraploids. The objective of this work was the construction of a genetic linkage **map** of diploid P. notatum (2n = 2x = 20) that can be used as a framework for basic genetic studies as well as breeding purposes. The **mapping** population derived from a cross between the genotypes Q4408410 and Tift9 that originated from Cayasta, Santa Fe, Argentina, and Tifton, GA, USA, respectively. Heterologous restriction fragment length polymorphism (RFLP) clones of **maize** (Zea mays L.), rice (Oryza sativa L.), and oat (Avena sativa L.) were used to cover the Paspalum genome uniformly in a comparative approach, while random amplified polymorphic DNA (RAPD) and amplified fragment length polymorphism (AFLP) markers were added to condense the linkage groups. A combined **map** was constructed with the markers segregating from both parental genotypes by the program JoinMap 1.4. A total of 149 marker loci were used for **map** construction. One hundred twelve loci were allocated to 10 linkage groups, covering a total **map** distance of 991 centimorgan (cM). The average distance between markers was about 9 cM. Paspalum Linkage Groups 1, 3, 4, 5, 6, 8, and 10 showed syntenic regions with **maps** of **maize** and rice. Moreover, several RFLP loci reported to be associated with **apomixis** in hybrids of **maize**-Tripsacum and Brachiaria were located on the **map**. This study provides a genetic linkage **map** of a subtropical forage grass with both sexual and apomictic forms, which can be used for investigating simple and complex traits.

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STN INTERNATIONAL SESSION SUSPENDED AT 13:12:00 ON 22 AUG 2005